

Citation for published version:

Gooch, D & Kelly, R 2016, 'Season's greetings: An analysis of Christmas card use', Paper presented at ACM SIGCHI Conference on Human Factors in Computing Systems (CHI 2016), San Jose, USA United States, 7/05/16 - 12/05/16.

Publication date:
2016

Document Version
Peer reviewed version

[Link to publication](#)

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Season's Greetings: An Analysis of Christmas Card Use

Daniel Gooch

Department of Computing and
Communications
The Open University
Milton Keynes, UK, MK7 6AA
Daniel.Gooch@open.ac.uk

Ryan Kelly

Department of Computer Science
University of Bath
Bath, UK, BA2 7AY
R.M.Kelly@bath.ac.uk

Abstract

Christmas is the time of year when people reaffirm social connections through the medium of Christmas cards. Although much communication in the modern age is conducted via electronic means, many people continue to send and receive paper-based cards during the festive season. With a view to understanding practices surrounding the use of digital and paper-based media, this paper explores the use of paper-based and electronic Christmas cards among a sample of university students. We describe students' practices regarding Christmas cards, examining motivations of use and perceptions of value associated with paper and electronic cards. Our analysis leads to a number of potential opportunities for enhancing the perception of electronic alternatives to paper-based cards.

Author Keywords

Christmas cards; Computer-Mediated Communication; Design; Effort; Personalization; Tangible Media.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

The rise of electronic social media offers unparalleled opportunities for correspondence with others around

the world. One consequence of this is a decline in paper-based correspondence. Yet, despite the apparent shift towards the use of electronic communication, one form of paper-based correspondence that remains popular is the traditional greeting card. In the UK, for example, over 800 million cards were sent in 2014, with Christmas cards accounting for over 100 million of these [3]. These figures stand in stark contrast to the overall decline in use of paper-based media, suggesting that cards still play an important social role in an era where electronic communication is now the norm.

Why do paper-based cards remain popular when computers now mediate a large percentage of our communications? In this work, we seek to understand the practices and perceptions that surround the use of electronic and paper-based greeting cards, focusing in particular on the use of Christmas cards during the festive season. The continued use of paper cards at Christmas time is intriguing given the presence of electronic alternatives (so-called 'e-cards'), which are presumably more convenient, faster, and cheaper than paper cards. Our aim here is to understand the perceived value associated with paper-based and e-cards. We report late-breaking findings from an online survey designed to collect data about these issues, and conclude the paper with potential directions for the design of electronic card sending systems.

Background and Related Work

Although Christmas is traditionally thought of as a Christian holiday, it is "one of the few rituals that is celebrated around the world, even in countries which do not have a Christian tradition" [8]. In HCI, only a small number of studies have examined the topic of Christmas. Petrelli et al. [11] explored novel

technologies for promoting interaction at Christmastime, finding that the use of paper cards as festive decoration was a significant part of the Christmas experience. Similarly, Petrelli and Light [10] use Christmas to explore the notion of designing around domestic rituals, observing that the preparation of cards plays a central role in the ritualised behaviours that occur in the build up to Christmas. However, these studies did not specifically examine practices and values concerning Christmas cards, nor did they examine the use of greeting cards or electronic media to exchange greetings.

As a tool for expressing festive greetings, Christmas cards serve an important purpose. The festive season is one of a handful of times when many people reconnect with their extended social circle [14]. What is interesting about this is that paper-based Christmas cards remain popular despite an upward trend in the use of digital media for communicating.

An emergent body of HCI research seeks to understand perceptions of worth and value in the exchange of paper-based media. For example, [5] found that the use of paper-based postcards was partly motivated by aspects of the medium (e.g. handwriting and opportunities for personalization) that are sometimes lost during digitization. Sellen et al. [15] obtained similar results in their evaluation of a mixed media messaging system intended for use in the home. Through investigating Christmas card use, we hope to contribute to this literature by further understanding how people use and value paper and electronic media. Given the continued popularity of paper Christmas cards, we want to better understand what it is that makes them special. Such an understanding might

allow us to transpose relevant design parameters into digital systems, in turn leading to novel user experiences with mixed media communication tools.

Study Design

We designed a 21-question survey containing questions that elicited quantitative and qualitative data about the exchange of Christmas cards. We also included requests for demographic information from our participants. The questionnaire was administered online, and was advertised via our University noticeboards over the two weeks prior to Christmas.

We opted to use University students as our initial study population as we believed that students are likely to send both paper and electronic cards at Christmas, as opposed to older adults who might solely fall back on the tradition of paper cards. In further work we hope to expand our study population to better understand whether different demographics have distinct Christmas card practices.

Participants were offered the chance to win four prizes of £10 as an incentive to participate in the study. Data cleaning of nonsense or blank responses left us with 47 complete questionnaires. Informants comprised 32 females and 15 males. Participants' ages ranged from 17–55 (*Mean* = 25, *Median* = 21).

We gathered respondents' religious affiliation to determine whether it had any impact on their use of Christmas cards. Our respondents included people of Christian (*N* = 15), Atheist (14), Agnostic (4), Muslim (1), Sikh (1), and Hindi (1) faith. A further 11 chose not to list their faith. We found that religious affiliation did not appear to impact sending behaviour, i.e. people

of non-Christian faith reported sending and receiving cards. This perhaps points towards the present-day role of Christmas in Britain as more of a sociocultural event, rather than strictly as a Christian festival [8, 14]. As such we saw no need to delineate our analyses on the basis of religious affiliation.

Analysis

The qualitative findings presented in this paper were derived from an analysis of aggregated responses to our survey questions. When interpreting responses, we adopted an inductive approach using thematic analysis [1]. We engaged in open coding to label the data and grouped our codes into themes that coalesce an initial set of perceptions about the use of paper and electronic Christmas cards.

Results

Number of Cards Sent and Received

We asked our participants whether they sent paper or electronic cards. Of our 47 respondents, 45 said they sent paper cards, with 2 stating they did not use them. Conversely, 15 people sent electronic cards and 32 did not send them. When asked how many Christmas cards they had actually sent this year, 8 people said that they had sent zero paper cards, whereas 33 people said they had sent zero electronic cards. There was a significant difference between the number of electronic cards (*M* = 3.21, *SD* = 8.94) and the number of paper cards sent (*M* = 21.19, *SD* = 36.21), paired $t(46) = -3.29$, $p = .002$. Similarly, there was a difference between the number of electronic (*M* = 2, *SD* = 3.64) and paper (*M* = 17, *SD* = 24.72) cards received, paired $t(46) = -4.23$, $p < 0.001$. These findings indicate a general prevalence in the use of paper cards over their electronic counterparts.

Practices

We first examined *to whom* our participants sent Christmas cards and *why*. We found that students typically sent cards to family and close friends with the aim of cementing and reaffirming relationships. Cards were described as an indication that the sender is thinking about the recipient, wants to make that person happy, and that cards can be an expression of love. In other words, each card is invested with value that goes beyond the aesthetics and content of the card [12]: *"To show people I care and to spread good cheer around at this time of year"* [Respondent 10].

This social glue seems particularly important when it comes to people who live a substantial distance apart. The card acts as a reminder that the recipient is still a part of the sender's social circle: *"I send also to my friends overseas as a way of making them understand that they are still in my life"* [R. 15]. The distance between the sender and recipient influences the choice of medium, though specific practices differed between participants: *"I send electronic cards or wishes to my friends at home and paper cards to those abroad"* [R. 13]. *"[I send electronic cards] to overseas friends, it is quickest way"* [R. 25].

Preference for Paper

Students showed a strong preference for *receiving* paper cards, even among those who did not like to *send* paper cards. The reasoning seems to be that because the sender themselves likes to receive paper cards, they think other people will like them too. This is not about reciprocity but about the individual's preference in terms of medium: *"Because I like the thought of receiving a proper Christmas card and I think it's the same for other people"* [R. 12].

Our respondents also enjoyed receiving paper cards because they arrive through the physical mail system. The most common explanation here was that paper cards break from the mundane qualities of modern post: *"It's always exciting to receive something interesting to read in the post that isn't junk mail"* [R. 11]. Similar results have been found with other items sent through the post (e.g. [5]) without a clear explanation as to *why* paper is regarded as being superior to electronic.

Personalization and Effort

A salient feature that distinguishes responses concerning paper and e-cards is related to personalization. In general, paper cards were seen as highly personal, with electronic cards seen as impersonal. Forms of personalization varied from handwriting through to the making of cards by hand. This process of personalization helps to associate the card with the individual who has sent it: *"I hand make all of my cards and write individual personal messages in each one"* [R. 40], *"I like seeing what someone has written in them"* [R. 4].

Conversely, the lack of personalization opportunities when creating e-cards is a negative property linked to their relative undesirability. The apparent lack of effort and meaning which are associated with this lack of personalization suggests that, as a form of social glue, e-cards are much less powerful: *"Because I think they are impersonal and meaningless"* [R. 36].

Evidence of personalization also seemed to increase the perceived worth of each card, with people ascribing more value to paper cards than electronic ones due to tradition, the effort involved, and some sense of

authenticity: *"Paper cards seem to show my concern and effort more than electronic ones"* [R. 16]. *"It makes you feel more special. More effort goes into writing a paper card and it is more personal from that person to you directly."* [R. 47]. Indeed, electronic cards were perceived less favourably, and sometimes as wholly inappropriate: *"They don't count as proper Christmas cards"* [R. 13]. *"They are impersonal and show no effort"* [R. 41].

Decoration

One of the rituals of Christmas is to decorate the home [6, 10, 11]. Participants emphasized the role that paper cards play in decorating: *"You can put paper cards up to make the house more festive"* [R. 26]. Conversely, electronic cards were predominantly seen as a computer-based media rather than something that could be viewed and shared: *"I don't like them [e-cards] because I prefer to have something that you can put up in the room rather than something just on your computer"* [R. 23].

Related to the display of cards, a few people saw the ability to retain correspondence as significant. While this was perceived as possible with paper cards, e-cards were not viewed in the same way, despite the ability to theoretically retain them in physical form via printing: *"I like to be able to keep them and look at them whenever I feel like it"* [R. 12].

Discussion

Our aim for this paper was to better understand the Christmas card sending practices of students. Our results show that students do continue to send Christmas cards, but there is a preference for sending and receiving paper cards as a mechanism for

strengthening social bonds. Our analysis indicates that this is not merely a matter of conforming to social convention. Instead, we have established a variety of issues that are tied to the perceived qualities of paper-based and electronic cards. For example, electronic cards were often described as cheap, impersonal, and of less worth than a paper equivalent, though e-cards were seen as fit for purpose when greeting far-flung friends or when senders were pressed for time. Conversely, paper cards were seen as more amenable to personalization and were of greater value because they require more effort in their dispersal. Since it appears that the use of digital media to express Christmas greetings is insufficiently meaningful, we see an opportunity to distil our findings into a variety of design challenges for electronic card sending systems. Specifically, these factors are: *Personalization, Effort, Decoration and Display, and Creating Value.*

The first property we identified was the creative investment of personalization in paper cards. In general, respondents valued the fact that paper cards contain traces of the sender; for example, cards usually display a person's handwriting, and some cards are made by hand. Previous work has found that personalization was appreciated in other contexts involving communication (e.g. [2, 5, 15]). Unlike paper cards, e-cards can sometimes offer relatively few opportunities for meaningful personalization. While some systems allow senders to make their text 'look handwritten' (e.g. Hallmark e-cards), systems could go beyond simple animations and typewritten text by permitting a sender to engage in freehand embellishment of their digital creations, or by allowing for the incorporation of media that is relevant to the history of the relationship (e.g. Facebook photos).

Our participants also indicated that they appreciated the effort invested by the sender in creating personal cards. Conversely, the lack of effort required to send an e-card seems to devalue its worth. We see a challenge in terms of offering opportunities to imbue e-cards with evidence of the investment of effort. We believe that this needs to be *meaningful* effort in the form of mindful and creative investments of time [4], as opposed to *meaningless* effort imposed by an interface that is difficult to use [13]. Meaningful effort also needs to be readily interpretable by the recipient; else it bears little value to either party. One way to do this might be to make the costs incurred by a sender clear to the recipient. Alternatively, one could introduce additional functionality that is possible only in digital media, such as a 'replay' of the sender composing their card. Thus, rather than addressing the limitations of digital media, designers could look for unique forms of value that are not possible to employ with paper-based systems.

We found that people valued paper cards because of their decorative role, making their house feel more Christmassy. Conversely, e-cards were seen as 'fire-and-forget'. Since the creation and display of cards are important ritual aspects of Christmas [10], the lack of physical presence in e-cards might disrupt this ritual and thus detract from the pleasure associated with the festive season. Physical cards carry additional meaning because repeated viewing may encourage the viewer to reflect on their relationship with the sender—an act that might be especially pertinent at Christmas. The design challenge, then, is to change the structure of e-cards such that they can be displayed in a meaningful manner. These factors speak to the need to rethink and reconsider what form e-cards can take. In the same way that web-design has matured from GeoCities-style

sites to more refined designs, e-cards might change from being emails with attachments into something which is considered to be less cheap, tacky and worthless. It is hoped that the design factors we have presented here could go some way towards achieving that transformation.

Conclusion and Further Work

Christmas is a time when people attempt, through the medium of cards, to cherish existing social connections and re-establish those that may have been lost. Yet in a world where paper-based correspondence is increasingly rare, people persist with the user of paper-based cards in favour of electronic alternatives. In this study we have thrown light on Christmas card sending practices among students of University age. Our data indicates that paper-based Christmas cards remain the de facto medium for expressing Christmas cheer, and although e-cards have a role in some scenarios, they are generally seen as inferior and improper for the expression of many Christmas greetings.

In future work we aim to widen the scope of our investigation by examining a variety of populations across the world. In particular we would seek out a more diverse range of respondents, looking at a broader demographic to ensure that our conclusions speak to wider audiences. To strengthen the conclusions, we would triangulate our data with some in-depth interview sessions to further unwrap the role of Christmas cards in modern life. This would help us examine the design challenges in greater depth and give us the ability to propose additional solutions.

References

- [1] Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative research in psychology*. 3, 2, 77–101.
- [2] Daniel Gooch and Leon Watts. 2011. The Magic Sock Drawer project. In *CHI '11 Extended Abstracts on Human Factors in Computing Systems* (CHI EA '11). ACM, New York, NY, USA, 243–252. DOI=<http://dx.doi.org/10.1145/1979742.1979613>
- [3] Greeting Card Association: Facts and Figures. <http://www.greetingcardassociation.org.uk/resources/or-publishers/the-market/facts-and-figures> Retrieved February 10th, 2016.
- [4] Ryan Kelly, Daniel Gooch, and Leon Watts. 2015. Is 'Additional' Effort Always Negative?: Understanding Discretionary Work in Interpersonal Communications. In *Proceedings of the 18th ACM Conference Companion on Computer Supported Cooperative Work & Social Computing* (CSCW'15). ACM, New York, NY, USA, 191–194. DOI=<http://dx.doi.org/10.1145/2685553.2699004>
- [5] Ryan Kelly and Daniel Gooch. 2012. Understanding participation and opportunities for design from an online postcard sending community. In *Proceedings of the Designing Interactive Systems Conference* (DIS '12). ACM, New York, NY, USA, 568–571. DOI=<http://dx.doi.org/10.1145/2317956.2318041>
- [6] Junko Kimura and Russell W. Belk. 2005. Christmas in Japan: Globalisation versus localization. *Consumption Markets and Culture*. 8, 3, 325–338.
- [7] Ann Light and Daniela Petrelli. 2014. The rhythm of Christmas: temporality, ICT use and design for the idiosyncrasies of a major festival. In *Proceedings of the 26th Australian Computer-Human Interaction Conference on Designing Futures: the Future of Design* (OzCHI '14). ACM, New York, NY, USA, 159–167. DOI=<http://dx.doi.org/10.1145/2686612.2686636>
- [8] Sally McKechnie and Caroline Tynan. 2006. Social meanings in Christmas consumption: an exploratory study of UK celebrants' consumption rituals. *Journal of Consumer Behaviour*. 5, pp. 130–144.
- [9] Daniel Miller. 1993. *Unwrapping Christmas*. Clarendon Press.
- [10] Daniela Petrelli and Ann Light. 2014. Family Rituals and the Potential for Interaction Design: A Study of Christmas. *ACM Transactions on Computer-Human Interaction*. 21, 3, Article 16 (June 2014), 29 pages. DOI=<http://dx.doi.org/10.1145/2617571>
- [11] Daniela Petrelli, Simon Bowen, Nick Dulake, and Ann Light. 2012. Digital Christmas: an exploration of festive technology. In *Proceedings of the Designing Interactive Systems Conference* (DIS '12). ACM, New York, NY, USA, 348–357. DOI=<http://dx.doi.org/10.1145/2317956.2318009>
- [12] Kim Potowski. 2011. Linguistic and cultural authenticity of 'Spanglish' greeting cards. *International Journal of Multilingualism*. 8, 4, 324–344.
- [13] Yann Riche, Nathalie Henry Riche, Petra Isenberg, and Anastasia Bezerianos. 2010. Hard-to-use interfaces considered beneficial (some of the time). In *CHI '10 Extended Abstracts on Human Factors in Computing Systems* (CHI EA '10). ACM, New York, NY, USA, 2705–2714. DOI=<http://dx.doi.org/10.1145/1753846.1753855>
- [14] Mary Searle-Chatterjee. 1993. Christmas cards and the construction of social relations in Britain today. In: *Unwrapping Christmas*, Daniel Miller (ed.) Oxford: Clarendon Press.
- [15] Abigail Sellen, Richard Harper, Rachel Eardley, Shahram Izadi, Tim Regan, Alex S. Taylor, and Ken R. Wood. 2006. HomeNote: supporting situated messaging in the home. In *Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work* (CSCW '06). ACM, New York, NY, USA, 383–392. DOI=<http://dx.doi.org/10.1145/1180875.1180933>